

ON A COLLECTION OF FOSSIL *POLYPLACOPHORA*
FROM NORTH-WESTERN TASMANIA, WITH DE-
SCRIPTIONS OF THREE NEW SPECIES.

[MOLLUSCA.]

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Plate xciv.

I have had the privilege of examining a number of fossil valves belonging to the genera *Chiton*, *Lorica*, and *Loricella*, collected by Messrs. E. D. and R. N. Atkinson from the well-known beds between Wynyard and Table Cape, Tasmania:

This collection is remarkable for the number of valves of *Lorica duniana* Hull,* associated with valves of no less than three hitherto undescribed species of *Loricella*. One anterior valve of *Lorica duniana* (which I described from a median valve) is included. This specimen is imperfect and greatly eroded, but sufficient of the sculpture remains to show that it consists of numerous radiating riblets, low, and broken transversely by irregular grooves. One median valve of *Chiton fossicius* Ashby & Torr,† was with the collection. The type-locality of this species is Table Cape.

The occurrence of no less than three strongly marked species of the genus *Loricella* in the Table Cape beds, and another species (*L. gigantea* Ashby & Torr) in the Mornington (Victoria) beds, is particularly interesting, in view of the fact that this genus is represented by a single living species, *L. angasi* Adams & Angas, which is common to South Australia, Tasmania, Victoria, and New South Wales. The fossils all differ from the living representative of this dwindling genus, the sculpture varying to a marked degree. The closely allied genus, *Lorica*, is also represented by three species in these beds, while one only, *L. volvox* Reeve, is now extant.

* These Proceedings, xxxv., p.264(1910).

† Trans. Roy. Soc. S. A., 1901, p.140.

1. LORICELLA MAGNIFICA, n.sp.

Plate xciv, figs.1, 1a.

Anterior, and one median valve.

Shell exceptionally elevated. Anterior valve with anterior slope straight, sculptured with five prominent radial ribs, bifurcating, or with subsidiary riblets, crossed by six concentric riblets. The number of slits is indeterminable owing to the worn state of the specimen. Width, 26; height, 11 mm.

Median valve: lateral areas strongly raised, irregularly sculptured with wavy lines; central areas with similar but shallower lines, crossed by numerous faint grooves. Width, 38 mm.

This species differs from *L. gigantea* Ashby & Torr (*Loc.*, Mornington, Victoria) in its remarkable elevation, and generally bolder sculpture. From a comparison of the median valve with a corresponding valve of *L. angasi* Adams & Angas, the specimen under review probably exceeded 70 mm. in total length.

2. LORICELLA OCTORADIATA, n.sp.

Plate xciv., fig.2.

One anterior valve.

Shell elevated. Anterior valve with anterior slope slightly concave, sculptured with eight very strongly marked and prominent ribs, increasing in width towards the margin; the interspaces very finely sculptured with irregular V-shaped lines. Width, 22; height, 8 mm.

3. LORICELLA ATKINSONI, n.sp.

Plate xciv., figs.3, 3a.

One anterior, and several median valves.

Shell moderately elevated. Anterior valve with anterior third of slope convex; sculptured with ten strongly raised irregularly pustulose radial ribs, crossed by a number of concentric wrinkles, the lines of which, in most instances, intersect the radial ribs at the pustules. Width, 20; height, 6 mm.

Median valve: lateral areas strongly raised, with two diverging pustulose ribs; central areas with marked wrinkles extending horizontally to the anterior row of pustules on the lateral areas,

where they curve and then cross the lateral areas at right angles. These wrinkles are crossed by faint vertical lines.

I associate this species with the collectors, who have discovered many interesting fossils in the Table Cape beds.

Types in collection of Messrs. Atkinson.

EXPLANATION OF PLATE XCIV.

- Fig. 1.—*Loricella magnifica*, anterior valve.
Fig. 1a.—*Loricella magnifica*, median valve.
Fig. 2.—*Loricella octoradiata*, anterior valve.
Fig. 3.—*Loricella atkinsoni*, anterior valve.
Fig. 3a.—*Loricella atkinsoni*, median valve.